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09/097,035 06/12/98 KROM

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EXAMINER

IM52/0201

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ART UNIT

PAPER NUMBER

1713

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 21

Application Number: 09/097,035  
Filing Date: June 12, 1998  
Appellant(s): KROM ET AL.

Scott A. McCollister  
For Appellant

EXAMINER'S ANSWER

MAILED  
FEB 01 2001  
GPO

This is in response to appellant's brief on appeal filed 12/7/00.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

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**(3) Status of Claims**

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 5, 1-12 and 22 have been canceled as opposed to the statement that they are withdrawn from consideration

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows: upon reconsideration the Examiner withdraws the rejection of Claim 21 under 35 U.S.C. § 102(b) as being anticipated by Coran. Otherwise the statement of issues is correct.

**(7) Grouping of Claims**

Appellant's brief includes a statement that claims 1-4, 6-7, 8-10 and 21 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8). The claims are separated as (i) Claims 1-4, 6-7 and 13-14, (ii) Claims 8-10, and (iii) Claim 21.

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

4,409,365	CORAN et al.	10-1983
5,962,573	BERTA	10-1999
5,066,729	STAYER, JR. et al.	11-1991

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(e.g., Claims 1-2), and it would have been obvious to use such polybutadienes because they are among the known ones. The imines taught by Stayer, Jr. are generic to the elected specie of N-butylidenebenzylamine, but Stayer, Jr. does not appear to disclose the specific specie. However, in as much as Appellant admits that N-butylidenebenzylamine is a known compound (specification, page 11, lines 2-3), and said compound is within the generic teachings of Stayer, Jr., lacking a showing of criticality for this particular compound it would have been obvious to one of ordinary skill in the art to use such with an expectation of equivalent results.

**(11) Response to Argument**

**(a) THE REJECTION UNDER 35 U.S.C. 102(B) AS BEING ANTICIPATED BY CORAN.**

***Claims 1-4, 6-7 and 13-14***

Appellant traverses the rejection first, because "Coran is not directed to the elected species" of the invention. This is not deemed to be persuasive because it does not refute that non-elected species of the instant claims are anticipated by Coran.

Appellant also traverses the rejection arguing that the second polymer of the instant claims excludes and does not encompass the presence of a nitrile rubber as taught by Coran. Appellant bases this argument on the statement that "--- the present invention requires the second polymer be substantially conjugated diene units or substantially conjugated diene and vinyl aromatic units" (underlining in original). It is further stated that this "--- excludes the Coran greater than 20% nitrile rubber requirement." This is not deemed to be persuasive because there is nothing in the claims which exclude the presence of acrylonitrile units in the nitrile rubber taught by Coran, i.e., "[p]referred nitrile rubbers comprise polymers of 1,3-butadiene and about 20-50 wt.% acrylonitrile" (col. 2, lines 50-51). Appellant's "comprising" language clearly permits the presence of as little as 20 % acrylonitrile units in the polybutadiene polymer, and it is not seen that the language "comprising substantially" changes the accepted meaning of the transitional phrase "comprising".

The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); *Ex parte Davis*, 80 USPQ 448, 450 (Bd. App.

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1948)("comprising" leaves "the claim open for the inclusion of unspecified ingredients even in major amounts"). See M.P.E.P. § 2111.03.

The further argument that the instant specification teaches and exemplifies 100% butadiene polymers or 100% butadiene/styrene copolymers is not deemed to be persuasive because the instantly claimed subject matter is not so limited.

The argument that Coran only teaches a mixture of the two components as opposed to the instantly claimed reaction product is also not deemed to be persuasive. Coran specifically teaches and claims that "block copolymers" are formed, which one of ordinary skill in the art would know requires the formation of a covalent bond through a reaction (Claim 8, and col. 2, lines 60-64). Further, one of ordinary skill in the art would expect that the conditions of mixing and processing, e.g., melt-mixing at 190°C and compression molding at 225°C would be sufficient for reaction to take place. It is also noted that this is within the conditions taught by Appellant for a reaction to occur.

The further argument that the nitrile rubber of Coran is only used as a minor component whereas in the instant invention it is a major component is not deemed to be persuasive because the instant claims have no limits on the relative amounts of the two components. In regards to the nitrile rubber being added to the composition for a different purpose than in the instant invention, it is well settled that the purpose does not have to be the same.

A *prima facie* case of obviousness (for a composition) does not require the solution of the same problem or recognition of the same advantages as the applicant's invention. *In re Dillon* 16 USPQ2d 1897 (CAFC, en banc, 1990), which overrules *In re Dillon* 13 USPQ 2d 1337 and *In re Wright* 6 USPQ 2d 1959.

#### Claims 8-10

Appellant's separate argument concerning Claims 8-10 are not deemed to be persuasive because they are based upon the same premise used in the above arguments, which have not been deemed to be persuasive, i.e., that the second polymer of the instant claims cannot contain the about 20 wt.% of acrylonitrile units as taught by Coran. Claims 8-10 only further limit the second polymer as containing at least 40 or 50 wt.% of the conjugated diene units.

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(b) The Rejection under 35 U.S.C. 103(a) as being unpatentable over Berta in view of Stayer, Jr. And Admissions by Applicant.

*Claims 1-4, 6-7 and 13-14*

Appellant argues that "--- Berta is at least a four component system, not likely to suggest a reaction product of two components". This is not deemed to be persuasive because the instant claims do not limit the number of components. Further, the argument that the two components of the anhydride grafted polypropylene and the functionalized polymers are not likely to react is contradicted by Berta's direct teaching that the functionalized polymers react with the anhydride groups of the grafted polymers (col. 5, lines 16-25). The only functional groups taught are hydroxyl and amine, the amine being specifically taught in both the amine-terminated polyalkylene glycols and olefin/alkylene oxide copolymers.

The argument that Berta's comparative experiments somehow show that the functionalized polymers do not react with the grafted polymers is interesting but not convincing. The argument that the oxidized wax and not the functionalized polymer interacts with the anhydride-grafted polymer is not supported by scientific reasoning or evidence. It is also contrary to the clear teachings of Berta in this regard, and the known reactivity of anhydride groups with amino and hydroxy groups. That the oxidized polyethylene wax may also interact with the grafted copolymer, or that the wax is a critical component, does not prove that the functionalized polymers do not react with the grafted polymers. The instant claims do not exclude the presence of an oxidized wax.

*Appellant* argues that there would be no motivation to select as the functionalized polymer to modify in Berta, the hydroxy-terminated polybutadiene, because it is only one of seven alternatives. However, in as much as it is one of the functionalized polymers specifically mentioned, one of ordinary skill in the art would clearly envisage it as one of the functional polymers to use. It is then also argued that "--- the skilled artisan is faced with considering all possible substituents for each of the seven potential functionalized polymers ---" and that "[t]he resultant number of possibilities is countless". This is not deemed to be persuasive because there are only two functional groups reactive with the anhydride

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groups within the teachings of Berta - amino and hydroxyl groups. Clearly, this does not create a countless number of possibilities as alleged, and does not invoke prohibited hindsight as alleged.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

It is the Examiner's position that only knowledge which was within the level of ordinary skill at the time the claimed invention was made has been used.

The argument that the functionalized polymer is only 2 to 8 parts per hundred of the thermoplastic olefin, or that it is only a minor constituent, is not deemed to be persuasive because Appellants claims read on such compositions. The instant claims do not require that the functionalized polymer be a major constituent.

*Claims 8-10*

Appellant does not make a separate argument for the rejection of Claims 8-10. Thus, the above arguments are also seen to adequately rebut Appellant's traversal of the rejection.

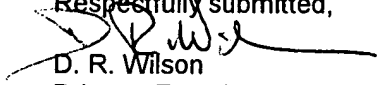
*Claim 21*

Appellant relies upon the same arguments discussed above and additionally argues a "superior combination" over the teachings found in Berta. This is not deemed to be persuasive because Appellant has provided no showing of superior results for compositions comprising the reaction product of a maleated polypropylene and amine terminated polybutadiene, over the other compositions taught and/or obvious over Berta.

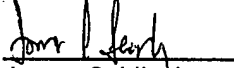
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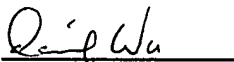
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
D. R. Wilson  
Primary Examiner  
Art Unit 1713

Conferees:

  
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January 30, 2001

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